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VACA VALLEY RADIO CLUB

VACAVILLE, CALIFORNIA

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January 2008

Message from the President

By Jerry Olive, KD6WKY

Happy New Year! We're back and ready to go for another amateur radio calendar year of activities, camaraderie, learning, and community support.

I think 2007 as I mentioned at our Holiday Dinner Meeting was a good year for the club. We took the time to prepare for Field Day which resulted in new membership and a fun weekend. We took the time to prepare for Merriment on Main and it resulted in a very nice evening of community support. There were other activities we helped with, but these two come to mind right away.

In 2008 we can build on these successes if we want to. Building on these successes means more club involvement though. The good thing is Field Day and Merriment on Main are now established club activities so they get going pretty easily, new activities need that initial push by someone to get them going. If that's a direction we want to go in, let's kick it around this month at the meeting.

One of the areas I want to establish first is getting that locker into the club house so we can store all the club meeting equipment all in one place all at one time right where we need it. I will be asking for help to get this done with firm times and dates to bring it in, place it, and organize it. Although not nearly as fun as installing that tri-band antenna on the tower which we did in January 2007, it is still vital that we get this done so that our meetings remain functional and convenient.

We have some financial business to take care of in January. Dues are due and ARRL membership dues through the club are being taken at the same time. Just as a reminder, the club keeps two dollars of your annual membership dues if you renew your ARRL membership through the club. New ARRL members signing up represent a fifteen dollar club contribution from that initial $39 annual dues payment. Bring your checkbooks everyone! The club renewal form is on page five of this newsletter and it has the ARRL portion newly added to the form.

We also have a little unfinished business from our December meeting. The 50/50 raffle will take place in January so you will want to be present for that.

I want to get started on time this month to start off the New Year. Please be on time. Thanks. As always, your club support is appreciated and welcomed. See you at the meeting this week! 73!

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Vaca Valley Radio Club Meeting Notes of Wed. 12 Dec., 2ØØ7

President Jerry Olive (KD6WKY), opened the December, 2ØØ7, general membership /Christmas dinner of the Vaca Valley Radio Club by welcoming some forty members, their family and friends, and distinguished guests.

It was our privilege to welcome Ti Michelle Connely (NJ6T) - the outgoing ARRL East Bay Section Manager, and Bob Vallio (W6RGG) – our ARRL Pacific Division Director, as guests for the evening.

Since the evening was dedicated to a time of good friends, good food, and fun, no "*official business*", per se', was conducted.

The much anticipated annual "Christmas drawing" needed to be postponed because our Treasurer, Bob, was unexpectedly called away in an emergency, to do what he does best – to lend a hand and help folks who are caught up in some sort of major disaster. This time Bob went North to help those many folks who lost <u>everything</u> when they were flooded out by the heavy rains and flooding in Washington state at Christmas time. (Thanks Bob! You do a tremendous job.)

A very special thanks to our good friends and sponsors who donated the many items for the evening's drawing. Everyone who attended was able to make a trip to the "goodie table" to choose a present when their ticket number was drawn.

A special recognition and present for the *"Youngest"* (and prettiest!) in attendance went to Lauren Vidal, daughter of our George (KK4XU), and Maria (KC4PGH) Vidal .

So, with the desert and coffee all gone, and everyone about talked-out, we informally closed the gathering for another year. A good time was had by all! If you missed it - mark your calendar NOW and plan on being part of the fun next year.

Respectfully submitted:

"Skip" Lawson KC6BXN

Solar Cycle 24 has Officially Started!

The solar physics community is abuzz this week. No, there haven't been any great eruptions or solar storms. The source of the excitement is a modest knot of magnetism that popped over the sun's eastern limb on Dec. 11th, pictured below in a pair of images from the orbiting Solar and Heliospheric Observatory (SOHO).

It may not look like much, but "this patch of magnetism could be a sign of the next solar cycle," says solar physicist David Hathaway of the Marshall Space Flight Center.

For more than a year, the sun has been experiencing a lull in activity, marking the end of Solar Cycle 23, which peaked with many furious storms in 2000--2003. "Solar minimum is upon us," he says.

The big question now is, when will the *next* solar cycle begin?

It could be starting now.

"New solar cycles always begin with a high-latitude, reversed polarity sunspot," explains Hathaway. "Reversed polarity " means a sunspot with opposite magnetic polarity compared to sunspots from the previous solar cycle. "High-latitude" refers to the sun's grid of latitude and longitude. Old cycle spots congregate near the sun's equator. New cycle spots appear higher, around 25 or 30 degrees latitude.

The region that appeared on Dec. 11th fits both these criteria. It is high latitude (24 degrees N) and magnetically reversed. Just one problem: *There is no sunspot*. So far the region is just a bright knot of magnetic fields. If, however, these fields coalesce into a dark sunspot, scientists are ready to announce that Solar Cycle 24 has officially begun.

Many forecasters believe Solar Cycle 24 will be big and intense. Peaking in 2011 or 2012, the cycle to come could have significant impacts on telecommunications, air traffic, power grids and GPS systems. (And don't forget the Northern Lights!) In this age of satellites and cell phones, the next solar cycle could make itself felt as never before.

The furious storms won't start right away, however. Solar cycles usually take a few years to build to a frenzy and Cycle 24 will be no exception. "We still have some quiet times ahead," says Hathaway.

Meanwhile, all eyes are on a promising little active region. Will it become the first sunspot of a new solar cycle? Stay tuned for updates from Science@NASA.

Editors Note—NASA has acknowledged that Solar Cycle 24 began January 4, 2008!

VACA VALLEY RADIO CLUB—2005 ELECTED OFFICERS

President: Jerry Olive, KD6WKY
Vice President: Mike Vieira, W6MAV
Secretary: Skip Larson, KC6BXN
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APPOINTED POSITIONS

Net Control Chairperson: Jerry Olive, KD6WKY
Activities Chairperson: Clyde Hood, WH6AB
Newsletter Editor: Jerry Olive, KD6WKY
Newsletter Publisher & Distributor: Bob Hewitt, K6HEW

Site Development 101: Getting Commercial Space for your Repeater

Erik Westgard, NY9D
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While the early role of Amateur Radio in emergency response was centered on message transmissions and relays from home stations, there is a strong requirement today for mobile, portable and data operations. Fixed infrastructure such as repeaters are key enablers here, allowing, for example, the use of inexpensive handheld transceivers. Repeaters in turn benefit from being on high elevation sites, such as towers, buildings, hilltops and water tanks.

Arguably, the highest and best repeater/node antenna sites may be owned or leased by commercial or government interests. Getting Amateur Radio equipment on those sites has always been an interesting challenge. While most potential radio antenna sites can be rented, that choice is not always in the budget of individuals or even groups of Amateur Radio operators. A rough idea of a commercial antenna space rental rate is about a dollar per foot of height, per antenna, per month.

Helping antenna site owners to understand the public service role of Amateur Radio is the key to getting your equipment onto sites at a reduced cost or even at no charge at all. In building the Minnesota Statewide Emergency Network, we installed

Amateur Radio equipment on close to a dozen new commercial and government sites, and even bought a commercial tower facility to fill a key coverage gap. There are a few basic principles you need to follow to get your equipment on the air, no matter where you live:

Steps to success in approaching the commercial site owner.

1. You need a written mission statement, outlining the goals and objectives of the proposed equipment installation. "I've always wanted to own an FM repeater" is not a good one, but "Our group has provided volunteer severe weather spotting in cooperation with National Weather Service since 1972, and could provide improved early warning of potential tornados in our county with this new site" would be better. This document should be around five pages, and should include the history of your group, how it is structured, and the accomplishments you have had to date.
2. You need to be very clear what you want to install and where. Think small. What is the minimum antenna and equipment package that will do the job? Site owners take pride in their facilities, and oversized antennas and truckloads of obsolete and unsightly equipment will not be popular, especially if you are not paying rent. Stealth antennas and tiny equipment cabinets are standard for us — one site owner said we could have space on a prestigious downtown building if "the antennas were not visible from the ground" — we found an MFJ antenna that was basically a car antenna whip that did the job.
3. Be respectful of their wishes on rules and contracts and other clauses. I use their leases, and never try to "negotiate" — if you are paying rent you can negotiate. I always insist on or agree to "we will leave at any time if asked" clauses. We are guests, not renters. That seems to reduce the stress on the other side of the table.
4. You need insurance. Legal remedies are available to those who are injured by accidents. Site owners are understandably wary of their risks in letting you on their property. Low cost insurance is available, and you need to have your building owners as "named insured" parties on your policy.
5. Leave the drill at home. We make every possible effort not to drill or saw at sites. Clamp on antenna mounts, and using existing holes for cable is our policy. In one recent case, we paid to have the building owner use their electrician to run the ground and drill the coax holes.
6. Avoid the best sites. The people who own the best antenna sites know this, and are used to getting many calls and the highest rent. We try to talk to those who have "second tier" sites, who are not in such demand. Do you really want your equipment to be on the same site as the primary equipment you are trying to back up?
7. Find a ham in the organization. This has been a "magic bullet" for us — if you have someone known and trusted in the group that owns the site, things will be much easier.
8. Use references. If you have had a good relationship with someone in a county, city or other served agency, ask if you can use their name. We have an impressive list, and this tends to work wonders.
9. Use commercial standards for cabinets, installations and grounding. In 30 years, we have never had a well grounded installation damaged by lightning.
10. Avoid constant pestering of your site owners. If you have temperamental equipment, having to bother them for access all the time gets tiring, and they get to ask themselves often why they let you on the site in the first place. We only use late model, type accepted gear, and try to visit no more than annually.
11. Offer to pay for the power you use.
12. Bring a broom — always leave the site clean after every visit.
13. Co-location on sites is normal. On commercial sites, the rule is "the last one on the site owns any new problems" so if you move onto a site, you need to ensure you don't bother the current users. If you do, take prompt and decisive action to fix any problem — assume you caused them. We have never had a problem with a non-amateur service radio user. Sadly, we have not had good luck co-locating with other amateur users, especially on the same bands, so we don't. This applies to publicizing the names and numbers of friendly site owners.

In short, you can get new sites, and add to our emergency services capabilities. You just have to approach the problem with the same skill, knowledge and professionalism you already apply to your communications activities.

Erik Westgard, NY9D is President of 14567.org, which led the development of the Minnesota Statewide Packet and D-Star Data Networks. He also volunteers as Medical Communications Director for the Medtronic Twin Cities Marathon. He has a BA from Macalester College and an MBA from Metropolitan State University. He is employed as a consultant for a major telecommunications carrier, and is a regular contributor to QST and an ARRL Life Member.

Straight Key Night 2008

SKN was another fun evening of working several stations using only a straight key. I worked five SKN stations New Year's Eve in between visiting with friends and family. Go to the soapbox section of the ARRL website to see the SKN photos.

THE VVRC WELCOMES YOU

The Repeater is Published by the Vaca Valley Radio Club, PO Box 143, Elmira, CA 95625-0143, An ARRL Affiliated Club. Founded 1987, Chartered 1988 General Meetings: 2nd Wednesday of each month at 7:30 PM 420 Vine Street Fire Station.

Wheelchair accessible

Visit the Repeater online courtesy of Bob K6HEW at:
http://users.cwnet.com/hewbob/vvrc
Club repeater in Vacaville:W6VVR 145.470 MHz(-) pl 127.3
Additional local repeaters
WV6F 224.200(-) WV6F 440.025(+) WV6F 1291.900(-)

Her First Field Day: One Woman's Field Day Adventure

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It was a typical June morning in Pacifica, California for our first Field Day event — cool with a light breeze under a brilliant, cloudless sky. The marine layer was still far off in the ocean and the hills to our east beckoned with golden-brown grass swaying gently. My partner Traci and I would set up our Field Day camp on the local 1200 foot peak atop Sweeny Ridge just a few minutes from our apartment on the coast. Imagine a middle-aged city woman, who'd been licensed just over a year, getting excited about camping out overnight. A woman whose previous vision of roughing it was a hotel without a Sleep Number bed.

A trip to Costco was a must; essentials included a tent, cooler, and sleeping bags, folding field table, lanterns. We left with enough food and equipment to sustain a small army for a month. I'd prepared hard, studying all the ARRL articles about Field Day events, especially food recipes. The Coastside Radio Club members discussed strategies for making and logging contacts at the meetings. I studied the computer logging programs, dupe sheets, and the paper backup logs. I practiced my script on my powered off handheld just to get the feel of it. "CQ Field Day, CQ Field Day, this is WA6TOW." Did I sound authoritative enough?

I rushed around the apartment, not wanting to miss a minute of Field Day. Finally, Traci and I loaded half of our home furnishings into the car for the 24 hour outing. We were ready!

A Chill in the Air

The club members met at the bottom of the hill shortly after sunrise on Field Day. We unlocked the gate and entered with plenty of time to set up the antennas and radios for the 11 AM Pacific Time start. The short trek up the mountain was akin to going back in time — this peak was the very place where San Francisco Bay was officially discovered by Spanish explorers.

I am no stranger to the microclimates of Northern California. Pacifica sits just south of San Francisco on the ocean side of the peninsula and has average temperatures in the 65 degree range year round. Much of the time the town is covered in a thick layer of ocean fog. But a few miles in any direction will yield much higher summer temperatures. On the other side of the coastal mountain range the temperatures can easily reach over 100 degrees Fahrenheit. But our Field Day station atop Sweeny Ridge surprised even me in the velocity and chill of the winds. Where T-shirts and shorts were perfect at the bottom of the hill, I had two shirts and three jackets on at the top. I had so many layers on I could barely get my arms flat against my sides. And I worried about the little nylon tent I had just purchased—would it be a shredded mess by the next morning? The Coastside club veterans had been coming up Sweeny Ridge for Field Day for two decades and more. They said this was one of the nicer days.

The Erector Set Goes Up

We parked the trucks and vans, unloaded the generators and gear, and began setting up the big antennas. All the various parts looked like so many long poles and wires to me. But the guys were patient and taught me how the giant erector set went together. When finished a few hours later we had two giant rotating antennas for the HF radios and one for the FM radio. The HF antennas looked much like our old TV rooftop antennas from the BC (Before Cable) era, only much bigger.

On the Air!

We had one HF radio operating by 11 AM. I was happy to watch and learn from the old-timers who had the honors of taking the early shift. The spinning dials and exotic sounds coming out of the radio speaker all fascinated me. The big dial wheel had an indent on its face, and the operators stuck their fingers in and twirled it until the signal went from something akin to Martian music to an actual voice calling CQ Field Day. It was a marvelous thing to watch. These men were expert conductors of a beautifully strange symphony of static, voices, dits and dahs—real artists at their craft.

Hikers, History and Hams

There were few visitors atop Sweeny Ridge, but there were those who made the long walk to the top. They stopped and stared at the big rigs, the antennas, and the van and tents filled with amplified voices and computers. We showed them around and they were all impressed, happy to sign our registration logs and help us earn extra points. Then they walked to the granite monument and read the inscription. "From This Ridge The Portola Expedition Discovered San Francisco Bay – November 4, 1769." The club's solar panel lay against the edge of the monument, gathering sunlight to supply power to one of the rigs, posing a strange juxtaposition of past and present.

The monument was perhaps, for me, more telling in what it didn't — what it couldn't — say. I walked to the west edge of the point and looked out onto my coastal town, jagged rocky cliffs and smooth beaches fighting the onslaught of the relentless cold ocean waters. It was breathtaking. Only a short 30 yards or so to the east end of the point and San Francisco Bay loomed large in the vista below. San Francisco Airport dominated the bay, runways cutting far into the shallow waters. Planes lined up and took off, taking a few seconds to finally get to our altitude.

It was a misty morning over the bay, beautiful and inviting. Buildings, homes, development of all types lined the shores and crawled to the base of the coastal range, but somehow it wasn't ugly; it held its own kind of beauty. I looked back to the monument, pictured the few surviving men in Portola's expedition as they stood where I was now standing. What had they seen when looking over the ridge?

Cross Country QSO

I got my first opportunity to work the HF radio several hours

after the experienced operators had had their fill for a while. I was nervous and excited. I don't operate the HF bands with my Technician license. I rarely get off the local repeater with my handheld transceiver, the only rig I own. The HF radio sat inside an old canvas tent; it smelled of mold and flapped hard in the wind. But it kept the cold out, and that was good enough. A pot of hot water sat in one corner for instant coffee. Ed, KD6TWK, and Quentae, KF6OLC, were my guides here. They taught me how to hunt signals, how to fine tune, and techniques for answering CQs across the radio waves traveling from distant places.

I got caught in a few pileups with no success. After several frustrating attempts I parked a few megahertz (I think they were megahertz) up the band and began calling CQ, establishing my own signal for others to chase. Patience was necessary, but it was hard not to turn the dial when an answer didn't come immediately. After nearly 10 minutes it seemed hopeless. I was about to give up when, after my next CQ, I had my first response. "WA6TOW, NF2AR how copy?" We got one! I was so thrilled I forgot what to say. I keyed the mike and read the script the club had prepared—good thing because I completely forgot the phonetic alphabet at that moment. "This is Whisky Alfa 6 Tired Old Woman..." I let the mike button go and looked at Ed. "Who wrote this? That's not right." He smiled and shrugged his shoulders. I keyed up again, "I repeat this is Whisky Alfa 6 *Tango Oscar Whiskey*. We are 2 Alfa, SCV Santa Clara Valley." "Tired Old Woman we are NF2AR, 3 Alfa, Northern New York. QSL?" "QSL." "Good luck on Field Day."

That was it. I'd logged my first contact and there were high-fives all around the tent. It got easier as the day went on. I learned more about HF in that 24 hour period than in all the reading I'd done. It was wonderful fun, addicting, and somehow so exciting. I don't understand why it is so thrilling to hit a station halfway across the country on these big radios with their giant antennas when I can flip open my cell phone and talk to anyone virtually anywhere just by punching in a few numbers. But it *is* exciting and wondrous. Maybe it's because radio is so basic and random, it doesn't depend on high technology to work.

I finally needed a break and it was time for others to take their turn. I walked back to the ridge line and looked out over the bay. The wind was stronger now and the sky was graying with overcast at our level. Our little tent, erected on the leeward side of some tall bushes, flapped but still stood; I grabbed my rain slicker. That was my fourth coat and last layer. I hoped it wouldn't get worse. It was easy to get chilled to the bone by the damp fog and wind even on an afternoon in June.

Premature QRT

By early evening Traci and I were tired; we slept in our tent as electronic dits and dahs embedded in radio static echoed over the hilltop. We slept lightly, concerned about the wind and fog battering our fragile temporary home. But it stayed up and as the winds eased in the pre-dawn morning, I got up to see about getting more radio time.

PLEASE RENEW YOUR MEMBERSHIP

VACA VALLEY RADIO CLUB, INC.

MEMBERSHIP APPLICATION / RENEWAL FORM

Please Print & Fill in Completely — Dues are delinquent January 1st

Name: _____ Call Sign_____
Street: _____
City: _____Zip: _____
Phone: (_____) _____-_____OK to Publish ?(_____)
License Class: _____ ARRL Member ?(_____)
E-Mail Address_____

FAMILY Member (Spouse or Children)

Name: _____ Call Sign_____
License Class: _____ARRL Member ?(_____)
Name: _____ Call Sign_____
License Class: _____ARRL Member ?(_____)
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MEMBER Dues --------- $15.00 _____
Each Family Member -- $ 2.00 _____
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Call/Name badge -------- $10.00 _____
Optional ARRL membership
ARRL dues ---------- $39.00 _____
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Senior is 65 yr or older with one time proof of age.

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